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ABSTRACT

Results of a two-part study of the economic attitudes of junior high school students are presented. While the primary thrust of Phase I of the project was to develop reliable and valid multi-item scales, the Economics Values Inventory (EVI), additional purposes were to test tentative hypotheses about factors associated with attitude differences and change, and to gain a glimpse into the actual content of adolescent economic activities. The Phase II design specified an initial measurement, or pretest, of students' economic attitudes as measured on the EVI scales, followed by an instructional period, then a post-test of the same youth's economic attitudes. Responses of the pretest group (N-1911), were factor-analyzed to see if essentially the same factors would emerge as in Phase II. In Phase I, economics knowledge proved to be the strongest predictor of students' economic attitude differences. The Phase II pre- and post-test displayed this tendency to an even greater extent. Greater economic knowledge was associated with (1) stronger affirmation of the free enterprise system; (2) an increased trust in business; (3) a decrease in feelings of being economically powerless and alienated; (4) decreased affirmation of governmental responsibility for social welfare; and (5) higher opposition to government price-setting, to unions, to statements that workers are treated unfairly, and to statements that attack the economic status quo. A copy of the EVI is appended. (LH)

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FACTORS ASSOCIATED WITH CHANGES IN YOUTHS' ATTITUDES TOWARDS ECONOMIC ISSUES

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--FACTORS ASSOCIATED WITH CHANGES IN YOUTHS' ATTITUDES TOWARDS ECONOMIC ISSUES

A. BACKGROUND AND PURPOSES OF THE STUDY

This presentation reports the results of a two-part study of the economic attitudes of junior high school age youth. In the first phase of the research, an original measure of economic attitudes was developed, the Economics Values Inventory (EVI). The EVI (see Appendixes 1-2) consists of eight moderately reliable multi-item scales:

Scale 1: Support for Free Enterprise System
Scale 2: Trust in Business
Scale 3: Economic Alienation and Powerlessness
Scale 4: Government is Responsible for Social Welfare
Scale 5: Against Government Role in Price-Setting
Scale 6: Against Powerful Unions
Scale 7: Workers Receive Fair Treatment
Scale 8: Against Economic Status Quo

The initial task of development of economic attitude items was informed by the contents of a textbook, Our Economy: How It Works, which was developed by the Foundation for Teaching Economics, the sponsor of the research.

It is important to note that the Economics Values Inventory is meant to reflect the content coverage of a junior high school economics text. It is based on one textbook, but we strongly feel that it has wide applicability. First, because that text is itself a reasonably comprehensive account of the field, at a conceptual level appropriate to junior high school youth, and covers thoroughly the ground outlined in the Joint Council for Economic Education's 1977 Framework for Teaching Economics. Second, because in those rare instances where we perceived gaps in text coverage, (such as in the treatment of the labor movement), we added items reflecting the underemphasized domain. And third, because where there were areas of importance in the text which did not correspond to areas in which respondents held definite views, we were able to omit such items from the EVI. The concepts which form the core of economics as a subject matter, and the areas in which adolescents typically have strong economic attitudes, are of course not strictly coterminous. The concept of the government's role as an economic regulator, for example, was important in the text, but was, generally, a matter neither of personal experience nor of opinion for our respondents. On the other hand, respondents might have had strong attitudes toward, for example, incurring debt to make consumer purchases, but such an attitude would be only marginal to the concepts and generalizations of a textbook. The EVI's grounding in the subject matter of economics is an important source both of its power and limitations.

While the primary thrust of the first phase of the project was to develop reliable and valid multi-item scales, additional purposes were to test tentative hypotheses about factors associated with attitude differences and change, and to gain a glimpse into the actual content of adolescent economic attitudes. The content of youth attitudes, and factors associated with observed economic attitude differences, were of interest both as validity indicators for the EVI and in their own right, and will be discussed in Section B, which deals with the outcome of the Phase I research.

Research Process

The Phase I research was conducted with approximately 1100 7th, 8th and 9th grade youth, in 35 classrooms, in all regions of the USA. A representative sample was not sought, but rather, a maximally diverse one, to ensure that the EVI would work with all groups of the junior high school age population. Initially 250 attitude items were developed, and reviewed with small focus groups of from five to six 7th, 8th, or 9th graders. Word choice was adjusted to student level of understanding, and overly complex or ambiguous items were modified or replaced.

A questionnaire of the 136 best items, and a series of basic demographic questions, was then administered in a pretest to 200 students. The responses were factor-analyzed and the process of item refinement continued, until a 100-item questionnaire was ready for use with a second pretest population. At this stage, scales were drawn from the attitude clusters that emerged in factor analysis, and were analyzed for variance by sex, race, grade, age and school.

The final empirical stage of the EVI development effort involved 452 junior high school students in a pilot study, employing a 71-item questionnaire. Responses from pretests and pilot were combined for a factor analysis of these remaining 71 items, and yielded eight distinct factors or attitude content areas. Items only weakly associated with a factor (that is, with loadings of less than .5) were dropped. Reliability analysis of the eight scales indicated that the reliability criterion of an alpha value of a minimum of .5 had been achieved for each scale, and thus a final, 44-item form of the EVI had been achieved. Characteristics of Pretest and Pilot Study students are displayed in Tables 1 and 2.

B. PHASE I FINDINGS

Content of Attitudes

Content of respondent attitudes on the scales is summarized in Table 3. Scale means for the junior high school population are contrasted to those of a group of high school seniors also tested on the instrument.

Characteristics Associated with Attitude Differences

The Phase I Pilot study was designed to permit examination of the EVI scale scores in relation to such variables as:

exposure to an economics curriculum;

extent of economic knowledge and understanding;

family socioeconomic status;

race;

sex;

political party identification.

The purpose of gathering such information was two-fold. First, examination of the relationship between scale scores and other variables was a way of posing the validity question of whether the scales measure what they are intended to measure. Second, exploration of these relationships gave insight into the mechanisms of possible attitude difference, continuity and change, an issue that was to be addressed in greater depth and in more experimentally controlled circumstances in the second phase of the research. Below, we summarize the research findings for each of these variables.

Instruction in Economics

One might hypothesize that a major impact of the junior high or middle school economics curriculum would be to increase support for the economic system and dampen feelings of economic alienation. Table 4A does indeed show a modest but statistically significant difference on the first three scales between those who have and have not had economics instruction. Students who have had economic instruction are more supportive of the American economic system, express greater trust in business, and feel greater personal efficacy in dealing with the economy. Of course, to suggest that the economics curriculum may have some modest effect on the economic attitudes of young people is to leave open the issue of whether such an impact is primarily an effect of greater cognitive understanding, or of more affective processes of the economic socialization process.

Economic Knowledge

One might also hypothesize that differences in extent of economic knowledge might be associated with attitudinal differences. For example, greater understanding of the economy and how it works might generate increased support for the economic system of the United States. Therefore, in the Pilot Study we included questions that allowed us to independently classify respondents according to their extent of economic understanding. The questions were from an abbreviated version of the Joint Council on Economic Education's nationally normed Junior High School Economics Test. Table 4B presents the differences in values of students with various amounts of economic knowledge.

Table 4B shows "extent of economic knowledge" to be a strong predictor of students' economic attitudes differences. On five of the eight scales, students with greater economic understanding have values that are reliably different from students with less understanding. Specifically:

> Students with greater economic knowledge (more test-items answered correctly) agree more strongly with the items that make up the Free Enterprise System Scale (Scale 1).;
>
> As level of economic knowledge increases there is a steady, statistically significant drop in students' feelings of powerlessness and alienation from the economic system (scale 3);
>
> Students with more economic understanding also more strongly oppose government price-setting activity (Scale 5), more strongly oppose powerful labor unions (Scale 6), and are significantly less likely to agree with statements that attack the economic status quo (Scale 8).

Of course, the seeming predictive power of economic knowledge might reflect either the effects of economic understanding on attitudes, or the propensity of youth with a particular set of economic attitudes to differentially acquire or possess economic knowledge, and only an experimental or quasi-experimental design, as employed in Phase II, could clarify the causal order within the relationship.

Socioeconomic Status

It might be hypothesized that support for the prevailing economic system would be highest, and alienation lowest, among those who, in terms of socioeconomic status, are the greatest beneficiaries of the system. (Socioeconomic status was determined by a combined parental education and occupation score.) The relationship between socioeconomic status and

economic attitudes is described in Table 5. Scale 1 ("Support for Free Enterprise System") scores in fact do not differ significantly across the socioeconomic groups, but the lower the socioeconomic status, the greater the economic alienation, the more support for government action in maintaining social welfare, the less antipathy toward powerful unions, and the less fair the current economic situation is perceived to be (Scales 7 and 8). Figure1 presents one line in Table 5 in graphic terms: it shows the striking relationship between socioeconomic status and support for the economic status quo (Scale 8). Note, however, that all socioeconomic groupings, despite the difference in their degree of agreement, indeed assent that the economic status quo is to some extent unfair.

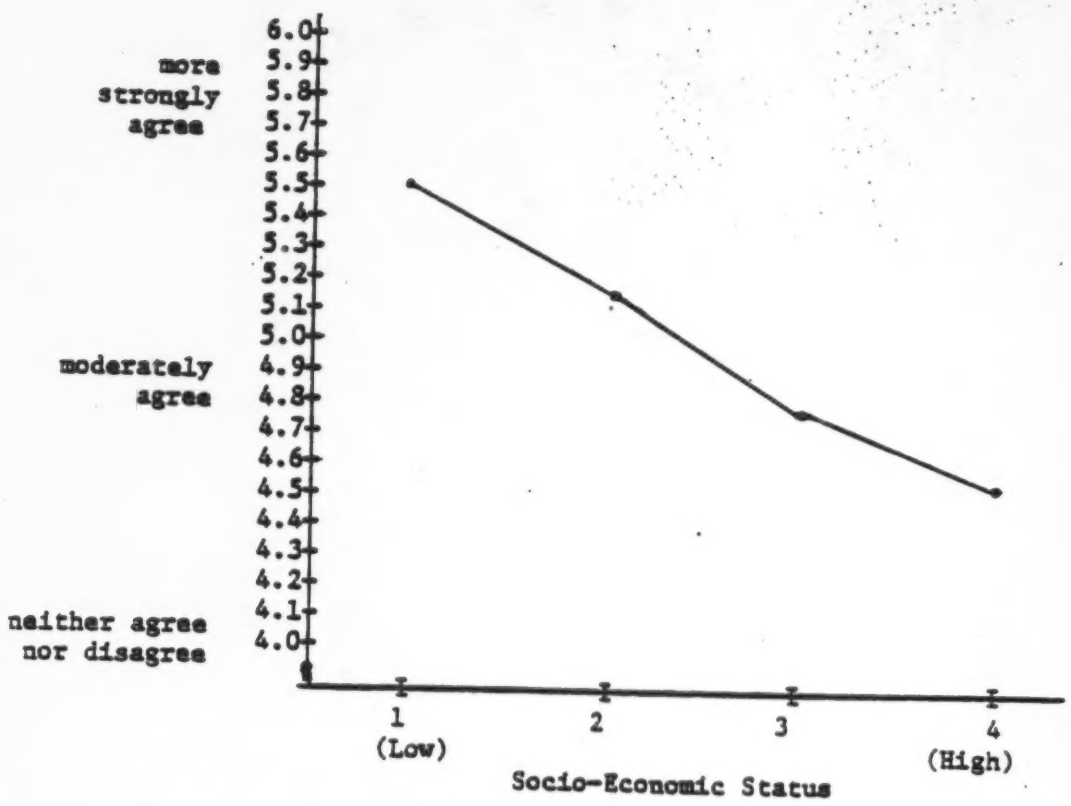

Figure 1: Belief that the Economic Status Quo Is Unfair and Should Be Changed (Scale 8), by Socioeconomic Status

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Political Party Identification

Pilot study respondents were asked to describe their political party identification, if any. Table 6 describes the relationship found between economic values and political party identification. Only on Scale 8, which indicates a belief that the economic status quo is unfair and should be changed, are there consistent differences by party.

Race and Sex

Differences by race are described in Table 7. The small numbers of Hispanics and Others in the sample argue for focusing on Black - White differences, which are both striking and at times paradoxical (for example, higher Black "Trust in Business" but stronger disagreement that workers are treated fairly, and less emphatic rejection of attitude items expressing feelings of economic alienation). There are few strong differences between the sexes on the scales (see Table 8).

Many of the Phase I findings are unsurprising, but serve as validity indicators for the scales. Others suggest relationships worthy of further investigation. For example, what is the relationship between such strong predictors as socioeconomic status and extent of economic knowledge? Are more knowledgeable students more attitudinallly sensitive to additional information, hence more likely to change; or is additional information attitudinally redundant for them? Given the interpenetration of economic and political categories, why does analysis by political party identification yield so little indication of attitude differences? Is "party" a poor indicator of political views, or is junior high school age a stage too soon to see political and economic attitudes brought into consistent relation with each other? Phase II of the study was designed to investigate these and other questions in more controlled circumstances over time.

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C. Phase II

Phase II Research Design

The Phase II design specified an initial measurement, or pretest, of students' economic attitudes as measured on the EVI scales, followed by an instructional period, then a posttest of the same youths' economic attitudes. Several sets of groups were utilized for comparison. For purposes of simplifying a complex set of comparisons, we focus here on, as appropriate, either the total sample, or the central comparison set, that of students who underwent instruction with an economics text (Our Economy) versus students who had no economics instruction in the same period. A subcomparison within this group was that of students who received a half-term (as contrasted to a full term) of economics instruction. (The final comparison, with which we shall largely not be concerned here, is that of a group of users of the text, versus users of alternative economics instructional materials.) For each comparison, a balanced number of classrooms from the same school was sought. Each school with a classroom receiving a full term of instruction with the text also contributed a classroom with no economics instruction. Distribution of these students reflected a principle approximating randomness. Thus, text users had not exercised an option to study the text, nor did they reflect a different academic ability track. Rather, due to the limited number of economics teachers, students had been assigned as a matter of administrative convenience to use the text either the first term of the session (thus falling into the user group for pretest and posttest) or the second (thus falling into the non-user group for purposes of this study). The empirical test of the likeness of the two groups in the comparison set was whether their pretest means on the EVI significantly differed. There were no systematic differencesin scale means between the two groups.

Responses of the pretest group (N=1911) were factor-analyzed to see if essentially the same factors would emerge as in Phase I. When a like factor structure emerged, scale reliabilities were recomputed utilizing the Phase II data. Essentially the same coefficient alphas for reliability (from .5 - .7) were obtained on the scales from Phase II Pretest data as had been computed from the Phase I data.

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Goals for Sample Composition for Phase II

In Phase I a maximally diverse sample had been sought. For Phase II, an in some respects more homogeneous sample was pursued by limiting respondents to the same grade (9), hence also restricting the age range; and by limiting the number (3) of cities used as sites. At the same time, care was taken to preserve a degree of heterogeneity with respect to factors such as race and socioeconomic status. Characteristics of the sample population are detailed in Table 9 .

Research Instruments for Phase II

Three research instruments were developed: a student Pretest Questionnaire, a student Posttest Questionnaire, and a Teacher Questionnaire (administered at the time of the student posttest). The Pretest Questionnaire consisted of the EVI, the same Economic Knowledge Test that had been employed in Phase I, and a Student Information section that elicited data on age, race, sex, and parental occupation and education. The Posttest repeated the EVI and Economic Knowledge Test, but also was designed to tap additional sources of collateral data . Thus, there were questions about attributional tendencies, which asked students to assess the importance of various explanations for personal economic success (for example, luck, ability, effort). Information was sought concerning political orientation. In Phase I, political party identification had been a surprisingly weak predictor of economic attitudes. Thus additional political orientation measures were included for Phase II, with a liberal-to-conservative ranking scale appearing in addition to the party affiliation question, and with several palpably ideological attitude items added to the end of the EVI as an objective check on the ideological self-description of the liberal to conservative ranking scale. Interest in public affairs was taken as another line of distinction that could be relevant to attitude differences and propensity to change. It might be thought, for example, that those with high interest in public affairs would be more open to economic ideas and thus might be more influenced by the school curriculuim. A contrary hypothesis would be that those with greater interest in public affairs would be more likely already to have made up their minds about economic issues, or would have access to competing (hence diluting) sources of information, and would therefore be less likely to change when exposed to textual materials. Three questions attempted to gauge such interest: frequency of watching the evening television news, interest in the election campaign, and propensity to read the news section of the daily newspaper.

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Finally, an attempt was made to assess respondents' views of information sources. They were asked both (a) how well informed about major issues; and (b) how important as information sources for them were each of the following: the media, fellow classmates, leaders of the business community, family/parents, clergy, teachers.

On the Teacher Questionnaire, teachers were asked to respond to the EVI and to supply additional information about their background, students, methods of instruction, and attitudes toward the text.

D. PHASE II RESULTS

In discussing Phase II results, we shall first address the issue of textbook impacts on attitude change. We shall then summarize findings for the race, sex, socioeconomic status, and economic knowledge variables. Finally, we shall examine the variables newly introduced in Phase II: interest in public affairs, ranking of teacher as information source, the expanded political identification variable, and the attribution (locus of control) variable.

Effects of the Economics Curriculum

The "text" versus "no text" conditions embodied in the study design might be seen in two perspectives. First, we think that the text that was employed for comparison purposes, as a comprehensive and straightforwardly factual account of economic concepts accompanied by a series of illustrative case studies, enjoys a degree of typicality which permits qualified generalization from its effects to the effects of economics curriculum materials in general. Second, note might be made of the particular emphases of the text, from which areas of expected attitudinal change might be hypothesized. Although the text's sponsors hold a strong value position on economic issues, the text itself is designed to be a descriptive presentation, and eschews specific value recommendations, instead asking students to be thoughtful about controversial issues. The text sponsors have, however, hoped that increased economic knowledge and understanding would have the effect of enhancing appreciation of the sort of mixed market economy, in which private enterprise has a large role, that prevails in the United States. And there is one values message that comes near to being explicit, namely the efficacy of the individual in the economic process. The text does attempt to help each student achieve greater awareness of being an important component, both as producer and consumer, in the economy. Given these emphases, the scales that could be hypothesized to be most salient as indicators of text impacts would be 1, 3, perhaps 2, and 7 and 8 . An analysis of covariance (deviation from the regression line of posttest on pretest) was utilized rather than the more error-prone simple computation of change scores. Table 10, based on the covariate analysis, depicts attitudinal change between the "text" and "no text" groups, and compares full- versus half-term instruction. Modest but statistically significant "text" versus "no text" differences are seen on scales 1, 2, 3, 7, and 8. Differences are in the hypothesized direction. Text users are more affirming of the free enterprise system scale (scale 1); they show more trust in business (scale 2); they feel less alienated (scale 3) they are more likely to feel that workers' treatment is fair (scale 7); they are less likely to express disagreement with the economic status quo (scale 8). Significant text/no text differences are not observed for the role of government scale (scale 4), or on the price control (scale 5) or union (scale 6) scales. In the less-controlled circumstances of the Phase I research, the effects of economics instruction were seen in statistically significant differences,in the same direction as seen for Phase II, on Scales 1, 2, and 3. One particularly interesting outcome of this analysis is that, as in Phase I, an effect of economics instruction is an increased affirmation of the Trust in Business Scale. Nevertheless, Trust in Business scores at the

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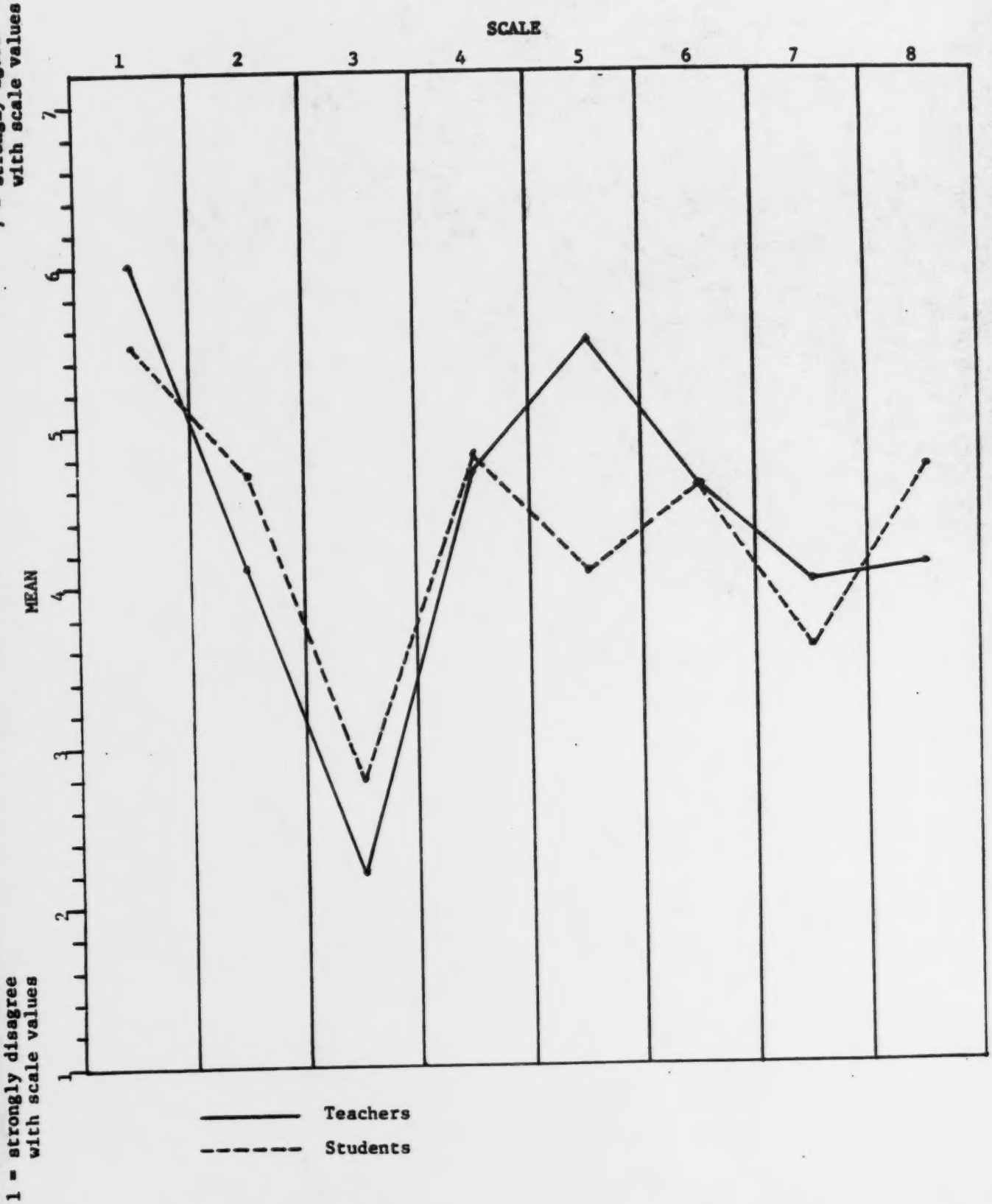
Pretest were associated with lower rather than higher levels of economic knowledge (TABLE 11). Given that the text has proven capacity to increase economic knowledge scores, this result is somewhat paradoxical. A further consideration here is that when, in Phase I, the EVI was administered to 207 high school seniors as a point of contrast with the junior high school group, it was found that the older youth showed significantly more support for scale 1, a significantly greater degree of rejection of the alienation items of scale 3, but substantially less trust in business. In comparing scale means of students to those of their teachers (Figure 2, next page; also Table 12), we see precisely the same phenomenon: teachers are more supportive on the free enterprise scale, and show less alienation, but also significantly less trust in business. It might be speculated that this paradox reflects the fact that both entrepeneurial and consumer values are allied more to healthy skepticism than to blind trust. If so, the data suggest that economics instruction can, at least as an end-of-course attitudinal effect, dampen this maturity- and knowledge-related trend.

Length-of-course effects appear for Scales 3, 5 and 8, with interaction between (half-versus full-term) site and text effects on Scales 3 and 8. It may be the case that certain categories of economic attitude are more influenced by duration of exposure to instruction than are others.

FIGURE 2: POSTTEST STUDENT versus TEACHER MEANS BY SCALE



Demographic and Knowledge Variables

The relationship of economic attitudes to race, sex, socioeconomic status, and economic knowledge was explored in Phase I. While in reporting the Phase II findings we would like to emphasize newly added variables (such as locus of control and interest in public affairs), a brief summary of the additional, Phase II, findings for the demographic and knowledge variables appears below.

In the Phase II Pretest, students of different races responded significantly differently to Scales 1 and 3, with whites showing more support for the Free Enterprise System scale than did blacks (5.6 versus 5.1) and with whites showing stronger rejection of the Economic Alienation and Powerlessness scale than did blacks (2.8 versus 3.4). There were no other statistically significant differences by race. The Phase II Posttest showed persistence of black/ white differences on Scales 1and 3 only.

Sex differences were more pronounced for the Phase II sample than they had been in Phase I. In the Phase II Pretest, significant differences arose on scales 2, 4, 5, and 8. Females showed more Trust in Business (Scale 2), greater affirmation of government's role in providing for social welfare (Scale 4), less opposition to government price setting (Scale 5), and greater rejection of the Economic Status Quo (Scale 8). In the Posttest, these differences persisted and male/female differences appeared on two additional scales, Scales 3 (Alienation and Powerlessness) and 7 (Workers Receive Fair Treatment). While females showed a lower alienation score at the Posttest, so did males, only even more so, thus widening a pre-existing gap, though both groups were moving in the same direction. A like phenomenon characterized the Workers Receive Fair Treatment scale, where female scale scores went up, but less dramatically than did male. One might speculate that the greater sex differences seen in Phase II reflect a slightly higher mean age for the sample (14 years, as contrasted to 13 years for the Phase I Pilot) and the tendency of attitudinal sex differences to become more pronounced with the progress of adolescence. It should be noted that sex differences for the sample were found in economics knowledge as well as attitudes. Males had higher Pretest economics knowledge scores. Both males and females undergoing economics instruction showed gains at the Posttest, but the male economics knowledge advantage persisted.

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On both Phase II Pretest and Posttest, significant differences were seen in the scale scores of students of different socioeconomic status, on scales 1, 3, 4, 6, 7 and 8. These differences are in the expected direction and essentially recapitulate the findings of Phase I. Thus, support for the Free Enterprise System scale increases with ascending SES, support for the alienation items decreases with ascending SES, and so on.

In Phase I, economics knowledge proved to be the strongest predictor of students' economic attitudes differences. The Phase II Pre- and Posttests displayed this tendency to an even greater extent, with statistically significant differences appearing on all scales, and with differences in the same direction as in Phase I. Thus greater economic knowledge was associated with stronger affirmation of the free enterprise system (scale 1), a decreased trust in business (scale 2), a decrease in feelings of economic powerlessness and alienation (Scale 3), decreased affirmation of governmental responsibility for social welfare (Scale 4), higher opposition to government price-setting (Scale 5), unions (Scale 6), to statements that workers are treated unfairly (Scale 7), and to statements that attack the economic status quo (Scale 8). Of course, although level of economic knowledge is associated with attitude differences on all scales, the imparting of economic knowledge through school instruction led to changes on only some of the scales. Due to the possibility that economic knowledge might in effect be a surrogate for socioeconomic status (that is, economic knowledge and socioeconomic status might be highly correlated, and observed knowledge differences merely a function of difference in socioeconomic status), a two-way analysis of variance was utilized to determine whether SES and economic knowledge had strong independent effects. Each was found to be a source of attitude differences in its own right.

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Interest in Public Affairs

Another variable that was explored was "interest in public affairs." Three questions were asked on the Phase II Posttest to gauge this interest. The three questions, with responses recorded in percentage form, appear below:

How interested were you in the election campaign?

23.7% Very interested
51.5% Somewhat interested
24.8% Not Very interested

How often do you watch the evening television news? (Check one only.)

20.3% Nightly
22.5% More than half the time
34.0% Sometime
18.9% Seldom
4.3% Never

How often do you read the local and national news sections of the newspaper? (Check one only).

10.9% Daily
11.8% More than half the time
29.8% Sometimes
32.2% Seldom
15.3% Never

The three questions were recoded and summed to form a 5-point Interest in Public Affairs Variable. Respondents were divided into High (interest), Medium and Low groups, and their means on scales 1 - 4 were compared. Analysis of this variable revealed no differences between high-medium-low interest in public affairs groupings on the Trust in Business or Government is Responsible for Social Welfare scales (see Table13.) However, significant differences were detected for scale 1 (Support for the Free Enterprise System), where the high interest group showed a mean of 5.8, the medium 5.6, and the low 5.4; and for the Economic Alienation and Powerlessness scale, where the high interest group was the least affirming of alienation items, with a mean scale score of 2.5, the medium interest group had a mean of 2.7, and the low interest in public affairs group a mean of 3.0. One caveat that should be entered here is that we have not yet conducted analyses of this variable that control for such attributes as socioeconomic status and economic knowledge. Its ultimate significance is therefore uncertain.

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Information Sources

The Phase II Posttest Questionnaire asked students both to give a rank order to selected information sources by prestige, that is, to indicate which was to be regarded as likely to be best informed about important issues; then to rank the same list in terms of which the respondent considered to be his or her own best personal information source. The results appear below:

Prestige: who is best informed?

Rank		Mean
1.	the media (television and newspaper reporters)	1.689
2.	leaders of the business community	2.228
3.	your family/parents	3.588
4.	teachers	3.694
5.	clergy (ministers, priests, rabbis)	4.314
6.	your fellow classmates	5.291

Utilization: who are the respondent's best sources?

1.	the media	2.089
2.	parents	2.533
3.	teachers	3.353
4.	classmates	3.766
5.	business leaders	4.211
6.	clergy	4.853

Combined rank (prestige + utilization):

1. the media
2. parents
3. business leaders
4. teachers
5. classmates
6. clergy

From the point of view of curricular effects, the comparatively low ranking of teachers as an information source, and the high rankings for media sources and parents, suggest a possible limitation on the role of the curriculum as a conveyor of attitudinal change. (A comparison that might profitably have been pursued, but was not, was prestige and utilization of various written information sources, such as textbooks, magazines and newspapers.) To further explore the relationship between student views of teachers as information sources, and their economic attitude differences, the combined rank responses were grouped into those showing high, medium, and low ratings of teachers. No significant attitude differences emerged between these three groups when their EVI scale scores were compared.

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Political Orientation

A particular point of interest, and one which we shall only be able to deal with in a very partial way, is the relationship between economic and political attitudes among junior high school age youth. The relationship is intriguing, among other reasons, because both political and economic attitudes are in this age group a nascent phenomenon, in the very process of crystallization. Recognition of the ramified interrelationships between the economic and political spheres would lead one to expect that at some point political affiliations or identifications and economic attitudes would be brought into close relationship, although this expectation might be somewhat qualified by the tendency in the USA to, as a matter of ideology, hive off the political and economic spheres. (Thus, for example, the refusal of the major parties to pose their policies in terms, primarily, of a conflict of class interests; the widespread endorsement of principles of political equality, side by side with acceptance of a goodly amount of economic inequality; and finally, the seeming faith that political equality can indeed exist in a society with extensive economic inequality.)

In Phase I of this study we were surprised to find that political party affiliation was generally a poor predictor of orientation on the eight attitude scales of the EVI. Thus, additional political information questions were asked in Phase II. A possibly confounding, possibly illuminating additional factor was seen as specific to the Phase II study, namely, that between the early September Pretest and the early January Posttest (second week of November for the half-term subsample), presidential and local election campaigns would take place. The 1984 election seemed one which posed a clear ideological choice between a liberal and a conservative presidential candidate, and seemed an election with a heavy economic issues focus. At the same time, the salience of economic issues, and of clearcut ideological choices, seemed as though it might have been more apparent than real, given the large numbers of self-described liberals and Democrats willing to vote for an avowedly conservative Republican, and given the surprising fluidity of political party identifications as reported by adults just after the election. The instability of adult partisan attachments in 1984, it was thought, might well leave their adolescent offspring less sure of their party or ideological orientations.

In the Teacher Questionnaire, given at the time of the Phase II Posttest, teachers were reminded of the presidential election campaign and were asked if they thought that the discussion of economic issues in the campaign had an effect on student interest in the text. Specifically, they were asked if the election had:

1 made students much more receptive
2 made students somewhat more receptive
3 had no effect
4 negative effect: made students less receptive
5 don't know.

Fully two thirds of responding teachers indicated that the election had had no effect; another third indicated that they felt the campaign had made students somewhat more receptive; no other category was opted for. The teachers may, of course, be entirely wrong in feeling that there was no or but slight interaction between the economics course and the election campaign; but their perspective is certainly worth entering here.

Students were asked a number of politically-oriented questions. They were asked: What political party do you lean toward? Responses in percentage form precede the statement of each response category:

20.1% I lean strongly toward the Republicans.
20.7% I lean slightly toward the Republicans.
12.3% I lean slightly toward the Democrats.
15.5% I lean strongly toward the Democrats.
31.3% I lean neither toward the Republicans nor the Democrats.

Thus, only 35.6% are willing to strongly commit themselves to either party, and fully 31.3% have leanings toward neither party. It is of course unclear whether the large number of uncommitted respondents reflects a persistent generational difference, or whether as political socialization proceeds, partisanship will reduce the uncommitted category. Since Phase I saw a similar proportion of uncommitted respondents, we have no evidence that lack of strong partisanship reflects the particular conditions of the 1984 election.

Respondents also were asked to rank themselves on a 7-point liberal-to-conservative scale. From the point of view of political ideas, such a scale might appear naive or incomplete, insofar as the liberal to conservative spectrum does scant justice to such positions as would be taken by a libertarian or a social democrat, and does not recognize the subcategorization of the political domain into economic, social, political-civil liberties liberalism and conservatism. From the point of view of our ninth grade sample, however, we feel that these categories are indeed

defensible -- in fact, a 7-point liberal-conservative scale may be overly subtle for the purpose, given the apparently unformed views of some respondents. Responses in percentages appear below:

2.7% Very Liberal
6.1% Liberal
6.2% Slightly Liberal
22.3% Moderate, middle of the road
7.0% Slightly Conservative
6.2% Conservative
2.0% Very Conservative
36.5% No opinion or don't know
11.0% No Response

Thus, only 30% of respondents were willing to categorize themselves as either liberal or conservative; and if we drop the "Slightly Liberal" and "Slightly Conservative" categories, strong liberal/conservative identification is claimed by only 17% of the sample. The feeling that an ideology label might be more meaningful to ninth graders than a party affiliation label would seem, in this instance misplaced. However, on some political matters respondents were more emphatic and sure.

The Posttest Student Questionnaire asked which candidate was favored by the student in the November presidential election. Here 50.2% favored Ronald Reagan, 35.3% Walter Mondale, 5.9% "Other," while 8.6% did not know or had no opinion.

Three questions had been tacked onto the Posttest EVI in an attempt to provide an "objective" check on respondents' ideological self-description:

> The Federal government should do more to reduce the gap between the incomes of poor people and the incomes of the wealthy.
>
> Bit by bit over the years, the government has been taking our basic freedoms away from us.
>
> The Federal government should not concern itself with reducing income differences between the wealthy and the poor.

However, these three items were plagued with very high "Don't Know" and "Indifferent" (point 4 on the 7-point scale) responses, with combined missing and indifferent values in one case approaching 40%. Thus, the ideology items appeared to rehearse the fundamental difficulty of the liberal-conservative scale itself.

Even given the substantial numbers of respondents without firm party or political ideology identifications, we may ask again what predictive power on the EVI scales such identifications had for those students who expressed them. When the ideology scale was employed as an independent variable and the scales were used as dependent varia-

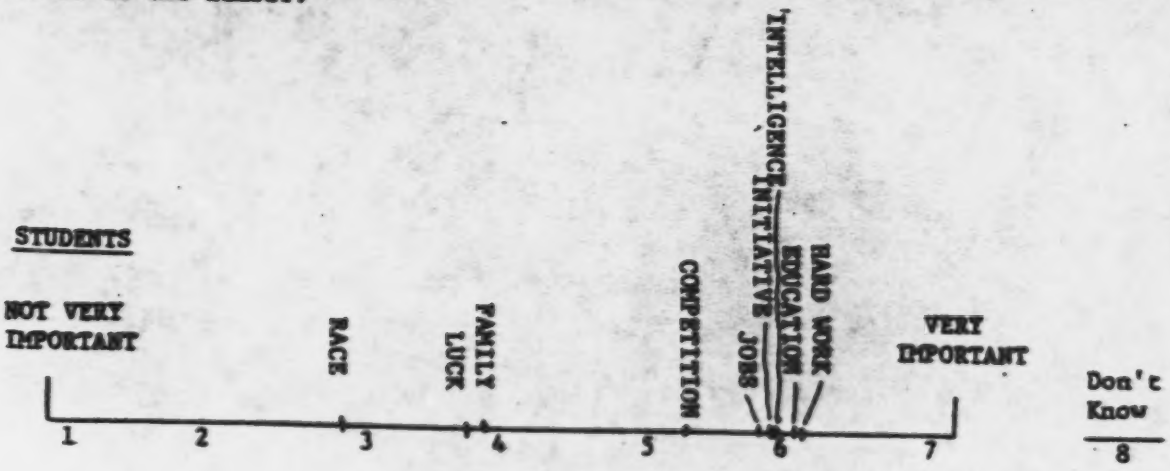
bles, no significant scale score differences emerged between students of differing liberal/conservative identification. However, and most unexpectedly, political party identification proved to be a strong indicator of attitude differences (see Table 14). There were significant differences by political party for all scales except Trust in Business. Republicans were reliably different from Democrats in their higher affirmation of the Support for Free Enterprise scale, in their stronger rejection of the Economic Alienation scale, in their lesser affirmation of government's responsibility for social welfare, in their opposition to government's role in price setting and to powerful unions, their greater tendency to agree that workers receive fair treatment, and their lesser agreement with items attacking the economic status quo. While at one level, this result is just what one would have expected, at another level, that of the expectations generated by the Phase I data, this result is extraordinary. It is uncertain why political party affiliation should have become so much stronger an economics atttitudes predictor in Phase II. It is true that we are dealing with a larger and slightly older sample, and that may have something to contribute to this effect. It is also possible that the presidential election campaign, in which three quarters of students expressed strong or moderate interest, influenced those who already had some tendency toward partisanship.

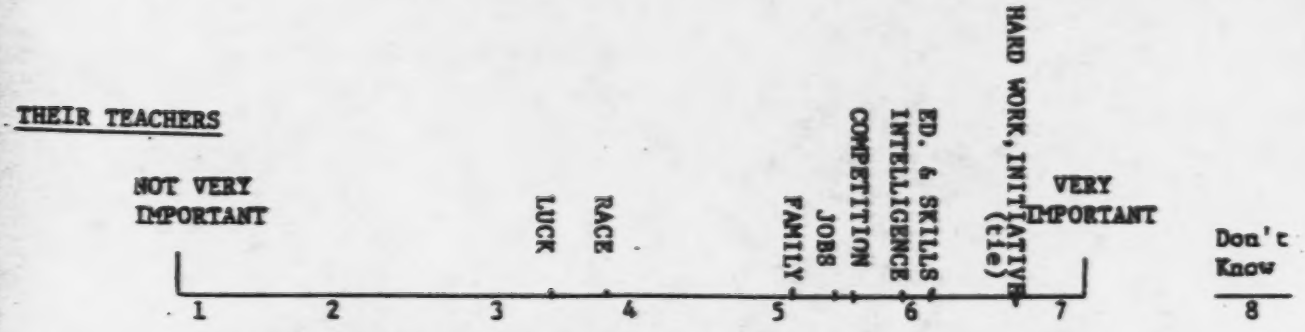
Locus of Control

A further variable that was explored measured youths' attributional tendencies. Respondents were asked to indicate their preferences for individual versus societal explanations for differential economic success of individuals, resulting in a "locus of control" indicator ranging from internal to external orientations. The "attribution" question is presented below. Figure 3 displays attribution means for both students and their teachers.

FIGURE 3: ATTRIBUTION/LOCUS OF CONTROL RESPONSES.

1. Some people are economically much better off (have better jobs, income, and housing, for example) than others. The following factors have been suggested as explanations for why such differences between people come about. Please give your opinion about the importance of each one. The more important you think a factor is, the higher the number, up to 7, that you will use. The less important you think a factor is, the lower the number.





How important is each factor below in explaining how economically well off (successful or unsuccessful) an adult individual is?

STUDENTS			TEACHERS
3.7	a.	luck (good luck, bad luck)	3.5
5.8	b.	the number of jobs available in our society	5.5
6.0	c.	a person's level of intelligence	6.0
3.9	d.	a person's family background (for example, rich parents and childhood advantages; poor parents, disadvantages)	5.1
6.3	e.	a person's willingness to work hard	6.7
5.4	f.	the number of well-qualified persons competing for jobs	5.6
5.9	g.	personal initiative (for example, will power, determination)	6.7
2.8	h.	a person's race or ethnicity (advantage--or disadvantage [for example, discrimination] because of the group one comes from)	3.9
6.3	i.	a person's education and skills	6.3

It is interesting to note that students rank as unimportant a factor such as SES which, sociologically, has such predictive power. However, it is perhaps the case that the individual-oriented categories, such as personal effort, which respondents rank as decisive, are less amenable to quantification and operationalization in hypothetico-deductive models, so that this apparent conflict between commonsensical and social scientific viewpoints may not be as great as appears. But note that teachers apparently give far more weight to the family background variable than do their students, perhaps the main significant respect in which they differ with them, although differences on the race and personal initiative items should also be remarked.

Earlier we stated that a primary purpose of the economics textbook that was utilized in this study is to enhance students' feelings of economic efficacy. Scale 3 may best be described as a measure of economic alienation and powerlessness or, to turn the coin over, of economic efficacy. And, of course, the feeling that a person's fate is individually or internally controlled, is commonly thought of as a feature of feelings of personal efficacy, while the feeling that one's fate is controlled by societal or external factors may be supposed to be a feature of feelings of personal inefficacy. For this reason, we sought to measure the correlation between Scale 3 of the EVI and internal versus external elements of the "locus of control" questions.

Seven of the nine elements in this question were utilized to create an internal versus external "locus of control" variable, conforming to the following four cells:

	Internal	External
(Stable)	c. intelligence d. education, skills	f. qualified competitors b. available jobs
(Unstable)	e. works hard g. has initiative	a. luck

Internal factors (c.,d, e.,g.) were given a plus value, summed, and divided by four; external factors (f.,b.,a.) were summed, given a minus value, and divided by three. The internal and external values were then combined to form one "locus of control variable." The "locus" variable had a range of -1.80 to +4.80, and a mean of 1.4. It was thus skewed toward the internal locus.

"Locus" means were compared for the "text versus no text" subpopulations and showed statistically insignificant differences (a mean of 1.4337 versus 1.4369). Note, however, that the "text versus no text" groups registered change at the posttest, with Scale 3 scores displaying a statistically significant decrease in alienation scale scores for the text user group (see Table 10).

Responses on the "Locus of Control" variable were divided into high, medium and low groups, relative to the "internal control" axis of the construct. Means on Scale 3 were then computed for each group:

Internal Locus	Scale 3 Mean
LOW	3.09
MEDIUM	2.62
HIGH	2.45

Level of significance for between groups difference = .0000

Thus, we can see that the lower the degree of internal locus of control, the higher the affirmation of the "alienation and powerlessness" items of Scale 3. Note that despite the correlation between scale 3 and locus of control, and despite the fact that the scale 3 scores of text users have changed over time, the underlying locus of control orientation of the respondents appears to be stable.

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Tables for

FACTORS ASSOCIATED WITH CHANGES IN YOUTHS' ATTITUDES TOWARDS ECONOMIC ISSUES

PHASE I
TABLE 1

Characteristics of Schools in the Pretests

SCHOOL	Race	Income	Location	Type	Economics Instruction	Grades	Number
1. Chicago Public	Black	Poor-lower middle	Urban, Midwest	Public (Magnet)	No	7, 8	65
2. Chicago Parochial	White	Lower middle to middle	Urban, Midwest	Parochial	No	7, 8	57
3. Chicago Montessori	Black, White	Upper middle	Urban, Midwest	Private	No	7, 8	15
4. Private Suburban (Winnetka)	White	Upper middle	Suburban, Midwest	Private	No	7, 8	55
5. Public Suburban (Evanston)	White, Black, Oriental	Lower middle to upper middle	Suburban, Midwest	Public	Grade 7--no Grade 8--yes	7, 8	84
6. Pennsylvania	Black	Very poor	Urban, East	Public	Yes (O.E.)	9	58
7. Kentucky 1	White majority	Lower middle to middle	Suburban, Border/South	Public	Yes (O.E.)	7	29
8. Kentucky 2	White	Lower middle to middle	Rural Border/South	Public	Yes	7	35

Total = 398

Pretest Summary by Grade, Race and Sex:

398 respondents:	Grade 7:	184	Black:	142	Male:	172
	Grade 8:	156	White:	222	Female:	226
	Grade 9:	58	Hispanic:	3		
			Other:	31		

PHASE I

TABLE 2

Characteristics of Pilot Study Students, by School

School	Economics Knowledge	Grade	$\bar{X}$ Age	Race	Mother's Profession	(Rank)	Mother's Education	(Rank)	Father's Profession	(Rank)	Father's Education	(Rank)	SES	(Rank)
San Francisco	2.59	8	13	Other (mixed inc. Asian)	3.5	(3)	3.41	(4)	3.82	(5)	3.52	(3)	2.80	(6)
Mississippi	3.51	9	14	Black	3.6	(2)	3.64	(1)	3.80	(6)	3.39	(5)	2.89	(4)
Kentucky 1	2.52	7	12	White	2.2	(5)	2.00	(7)	3.21	(8)	2.13	(8)	1.85	(8)
Kentucky 2	3.40	7	12	White	3.1	(4)	2.42	(6)	3.46	(7)	2.66	(7)	2.28	(7)
Oklahoma 2	4.72	8	13.5	White	3.5	(3)	3.51	(3)	4.65	(2)	3.84	(1)	3.29	(1)
Houston	4.61	9, 10	14	White, Black, Hispanic	3.5	(3)	2.84	(5)	4.13	(4)	3.36	(6)	2.87	(5)
Oklahoma 1	3.86	9	14.5	White	3.9	(1)	3.54	(2)	4.69	(1)	3.42	(4)	3.14	(3)
Phoenix	3.90	8	13	White	3.9	(1)	3.51	(3)	4.55	(3)	3.74	(2)	3.26	(2)

Pilot Respondents by Grade, Race and Sex:

Grade:	Grade 7: 56	Race:	Black: 88	Sex:	Male: 208	Total = 452
	Grade 8: 282		White: 287		Female: 217	
	Grade 9: 91		Hispanic: 12		no information: 27	
	Grade 10: 6		Other: 41			
no information	17	no information	24			

PHASE I

TABLE 3

Average Scale Scores for Younger vs. Older Students

VALUES SCALES	Junior High School Students	Senior High School Students
1. Support for Free Enterprise System	5.4	5.7
2. Trust in Business	4.7	4.4
3. Economic Alienation and Powerlessness	2.8	2.5
4. Government is Responsible for Social Welfare	4.9	4.8
5. Against Government Role in Price Setting	4.0	4.2
6. Against Powerful Unions	4.6	4.5
7. Workers Receive Fair Treatment	3.1	3.0
8. Against Economic Status Quo	4.8	4.6

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE I

TABLE 4A

Junior High School Students: Scale Scores of Those Who Have Had Economics Instructions and Those Who Have Had No Economics Instructions

VALUES SCALES	Economics Instructions: Yes	Economics Instructions: No	p level
1. Support for Free Enterprise System	5.51	5.34	.003
2. Trust in Business	4.77	4.46	.000
3. Economic Alienation and Powerlessness	2.75	3.00	.003
4. Government is Responsible for Social Welfare	4.94	4.80	n.s.
5. Against Government Role in Price Setting	4.02	3.96	n.s.
6. Against Powerful Unions	4.55	4.74	n.s.
7. Workers Receive Fair Treatment	3.16	3.08	n.s.
8. Against Economic Status Quo	4.80	4.90	n.s.

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE I

TABLE 4B

Junior High School Students: Scale Scores of Youth with Different Levels of Economic Knowledge

VALUES SCALES	Extent of Economic Knowledge (Number of Items Correct Out of 7) 0 - 2	3 - 4	5 - 6	7	p level
1. Support for Free Enterprise System	5.23	5.52	5.88	5.82	.000
2. Trust in Business	4.93	4.75	4.65	4.32	n.s.
3. Economic Alienation and Powerlessness	3.37	2.95	2.41	2.06	.000
4. Government is Responsible for Social Welfare	4.91	4.90	4.72	4.50	n.s.
5. Against Government Role in Price Setting	3.54	3.63	4.36	4.03	.017
6. Against Powerful Unions	4.29	4.56	4.76	4.91	.009
7. Workers Receive Fair Treatment	3.18	3.09	3.13	3.64	n.s.
8. Against Economic Status Quo	4.98	5.04	4.49	4.05	.000

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE I

TABLE 5

Scale Scores of Junior High School Students of Different Socio-Economic Status*

VALUES SCALES	Socio-Economic Status (Lower) 1	2	3	(Higher) 4	p level
1. Support for Free Enterprise System	5.32	5.36	5.54	5.46	n.s.
2. Trust in Business	5.12	4.90	4.59	4.47	.000
3. Economic Alienation and Powerlessness	3.35	3.02	2.80	2.69	.001
4. Government is Responsible for Social Welfare	5.40	5.14	4.80	4.73	.000
5. Against Government Role in Price Setting	4.06	3.92	3.80	4.19	n.s.
6. Against Powerful Unions	4.45	4.34	4.66	4.69	.003
7. Workers Receive Fair Treatment	2.78	2.89	3.20	3.27	.013
8. Against Economic Status Quo	5.50	5.17	4.87	4.53	.000

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

* Socio-Economic Status (SES) is a composite variable defined by 4 variables: Mother's and Father's Education and Profession.

PHASE I
TABLE 6

Scale Scores of Junior High School Students with Different Political Party Identifications

VALUES SCALES	Strongly Republican	Slightly Republican	Slightly Democratic	Strongly Democratic	p level
1. Support for Free Enterprise System	5.76	5.60	5.45	5.51	n.s.
2. Trust in Business	4.88	4.32	4.60	5.06	.006
3. Economic Alienation and Powerlessness	2.59	2.74	2.90	2.88	n.s.
4. Government is Responsible for Social Welfare	4.57	4.62	4.75	5.09	n.s.
5. Against Government Role in Price Setting	4.06	3.87	3.60	4.17	n.s.
6. Against Powerful Unions	5.02	4.80	4.75	4.50	n.s.
7. Workers Receive Fair Treatment	3.33	3.70	3.18	2.96	n.s.
8. Against Economic Status Quo	4.33	4.46	4.84	5.22	.000

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE I

TABLE 7

Junior High School Students: Scale Scores of Those with Different Racial Backgrounds

VALUES SCALES	Hispanic	Black	White	Other	p level
1. Support for Free Enterprise System	5.29	5.29	5.53	5.38	.002
2. Trust in Business	4.51	4.90	4.53	4.76	.001
3. Economic Alienation and Powerlessness	3.28	3.12	2.70	2.80	.000
4. Government is Responsible for Social Welfare	4.85	5.07	4.82	4.89	n.s.
5. Against Government Role in Price Setting	2.73	4.03	4.06	3.69	n.s.
6. Against Powerful Unions	4.17	4.18	4.82	4.68	.000
7. Workers Receive Fair Treatment	2.67	2.89	3.20	3.34	n.s.
8. Against Economic Status Quo	4.76	5.26	4.70	4.59	.000

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE I

TABLE 8

Scale Scores of Male and Female Junior High School Students

VALUES SCALES	Males	Females	p level
1. Support for Free Enterprise System	5.49	5.39	n.s.
2. Trust in Business	4.61	4.68	n.s.
3. Economic Alienation and Powerlessness	2.87	2.81	n.s.
4. Government is Responsible for Social Welfare	4.80	4.98	.026
5. Against Government Role in Price Setting	4.19	3.84	.009
6. Against Powerful Unions	4.73	4.52	n.s.
7. Workers Receive Fair Treatment	3.23	3.02	.049
8. Against Economic Status Quo	4.73	4.94	.020

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

TABLE 9

CHARACTERISTICS OF PHASE II STUDENT SAMPLE

Pretest N = 1911; Posttest N = 1711.

By site:	Cedar Rapids N =	1231
	Durango	226
	Minneapolis	454
By Posttest Comparison Conditions:		
	Full term of text N =	726
	Half term of text	220
	No Economics	585
	Alternative Economics	180
By Race	Black N =	139
	White	1525
	Hispanic	40
	American Indian	39
	Other	55
	No Information	113
By Sex	Male N =	913
	Female	895
	No Information	103

By Site and Comparison Conditions:

Cedar Rapids =	Full term text vs. Half term text	No Text
and		
Durango =	Full term text vs.	No Text
Minneapolis =	Full term text vs.	Alternative Economics Materials

TABLE 10

PHASE II PRETEST - POSTTEST CHANGE: ANALYSIS OF COVARIANCE BY TEXT USERS AND NON-USERS AND BY FULL-TERM VERSUS HALF-TERM ECONOMICS INSTRUCTION

VALUES SCALE	p VALUE FOR MAIN EFFECTS		MEANS		
	Duration	Text Use	Text Yes	Text No	
1. Support for Free Enterprise System	.952	.000	5.83	5.56	full term
			5.84	5.58	half term
2. Trust in Business	.992	.001	4.77	4.61	full term
			4.73	4.44	half term
3. Economic Alienation and Powerlessness	.007	.037	2.56	2.70	full term
			2.73	3.02	half term
4. Government is Responsible for Social Welfare	.411	.730	4.81	4.81	full term
			4.81	5.02	half term
5. Against Government Role in Price Setting	.001	.508	4.10	3.99	full term
			4.47	4.41	half term
6. Against Powerful Unions	.939	.666	4.69	4.75	full term
			4.83	5.08	half term
7. Workers Receive Fair Treatment	.062	.014	3.76	3.50	full term
			3.45	3.41	half term
8. Against Economic Status Quo	.008	.049	4.55	4.70	full term
			4.79	5.52	half term

Effects significant at .05 are underlined.

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE II
PRETEST

TABLE 11

Scale Scores of Junior High School Youth with Different Levels of Economic Knowledge
Items Correct Out of 7

	VALUES SCALES	0 - 2	3 - 4	5 - 6	7	p level
1.	Support for Free Enterprise System	5.2	5.6	5.7	5.9	.000
2.	Trust in Business	4.9	4.8	4.7	4.5	.000
3.	Economic Alienation and Powerlessness	3.5	3.0	2.6	2.2	.000
4.	Government is Responsible for Social Welfare	4.9	5.1	5.0	4.7	.000
5.	Against Government Role in Price Setting	3.8	3.7	4.3	4.5	.000
6.	Against Powerful Unions	4.3	4.6	4.6	4.8	.000
7.	Workers Receive Fair Treatment	3.2	3.3	3.5	3.8	.000
8.	Against Economic Status Quo	4.9	4.9	4.8	4.4	.000
	Percentage of sample:	21%	32%	37%	10%	

1 = strongly disagree with scale values

2 = strongly agree with scale values

N = 1911

TABLE 12

PHASE II SCALE MEANS: POSTTEST, TEACHERS vs. STUDENTS

VALUES SCALES	Teachers	Students
1. Support for Free Enterprise System	5.9	5.6
2. Trust in Business	4.1	4.7
3. Economic Alienation and Powerlessness	2.2	2.8
4. Government is Responsible for Social Welfare	4.7	4.8
5. Against Government Role in Price Setting	5.5	4.1
6. Against Powerful Unions	4.6	4.6
7. Workers Receive Fair Treatment	4.0	3.6
8. Against Economic Status Quo	4.1	4.7

1 = Strongly disagree with scale values

2 = Strongly agree with scale values

Teacher N = 16

Student N = 1711

PHASE II

TABLE 13

Scale Scores of Junior High School Students with Different Levels of Interest in Public Affairs (Posttest)

VALUES SCALE	High Interest	Medium Interest	Low Intrest	p
1. Support for Free Enterprise System	5.8	5.6	5.4	.0000
2. Trust in Business	4.7	4.6	4.7	N.S.
3. Economic Alienation and Powerlessness	2.5	2	3.0	.0000
4. Government is Responsible for Social Welfare	4.8	4.7	4.8	N.S.

Note: this analysis was run on the first four scales only.

N = 1711.

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

PHASE II
TABLE 14

Posttest Scale Scores of Junior High School Students with Different Political Party Identifications

VALUES SCALE	Strongly Republican	Slightly Republican	Slightly Democratic	Strongly Democratic	p
1. Support for Free Enterprise System	5.8	5.7	5.5	5.6	.0000
2. Trust in Business	4.8	4.7	4.6	4.7	N.S.
3. Economic Alienation and Powerlessness	2.5	2.6	2.7	2.9	.0004
4. Government is Responsible for Social Welfare	4.6	4.7	4.9	5.1	.0000
5. Against Government Role in Price Setting	4.3	4.0	4.1	4.0	.0389
6. Against Powerful Unions	5.0	4.8	4.6	4.2	.0000
7. Workers Receive Fair Treatment	4.0	3.7	3.6	3.1	.0000
8. Against Economic Status Quo	4.3	4.6	4.6	5.1	.0000

N = 1711

1 = Strongly disagree with scale values

7 = Strongly agree with scale values

Ingels and O'Brien

Appendix for

FACTORS ASSOCIATED WITH CHANGES IN YOUTHS' ATTITUDES TOWARDS ECONOMIC ISSUES

Appendix 1: The Economics Values Inventory

Appendix 2: The EVI in a Form for Classroom Use

APPENDIX 1:

THE ECONOMICS VALUES INVENTORY (EVI)

THE ECONOMICS VALUES INVENTORY

SCALE 1. THE FREE ENTERPRISE SYSTEM (Support for free enterprise system)

1. Resources are always limited, and we must make hard choices about the best way to use them.
2. Profits are essential to our country's economic health.
3. Our society owes much to the contributions of business.
4. If workers want higher wages, they must work harder and produce more.
5. People who blame other people or society for their problems are just copping out.
6. My freedom to choose my own occupation is very important to me.
7. It's the duty of people to do their jobs the best they can.
8. Competition between businesses makes for the lowest prices.
9. A company deserves its profits when they come as the result of doing the best job for less money.
10. If you have a valuable skill, you'll get ahead in our society.
11. Groups of individuals with specialized skills, working together, can produce better products than individuals working alone.
12. Our economy needs more people who are willing to save for the future.

SCALE 2. BUSINESS (Trust in business)

13. Most businesses won't sell products they think are unsafe.
14. Government should listen more to what the business community has to say.
15. Businesses could provide more jobs, goods, and services if they didn't have to pay so much in taxes.
16. Advertising helps consumers to make intelligent choices.
17. Most people like their jobs.

SCALE 3. PSYCHOLOGICAL: PERSONAL ECONOMIC EFFICACY (Alienation and powerlessness)

18. It's no use worrying about the economy; I can't do anything about it anyway.

19. Getting ahead is mostly a matter of luck.

20. It's foolish to do more than you have to in a job.

21. Having the freedom to start my own business really means having the freedom to take advantage of others.

22. Being in business means taking unfair advantage of others.

23. Profit is a sign that someone is being taken advantage of.

24. The way our economic system is set up, nobody has a chance to get ahead any more.

SCALE 4. GOVERNMENT ROLE IN SOCIAL WELFARE (Government is responsible)

25. It is the responsibility of the government to take care of people who can't take care of themselves.

26. The poor and the ill have a right to help from the government.

*27. A person who cannot find a job has only himself to blame.

28. It should be the duty of government to be sure that everyone has a secure job and a decent standard of living.

29. The unemployed shouldn't blame themselves for their situation: it's the fault of the economic system.

*30. Taking care of the poor and the sick is the job of families and churches, not the job of the government.

SCALE 5. GOVERNMENT ROLE IN SETTING PRICES (Against government role)

*31. Companies should only be allowed to charge a government-controlled price for their products

32. It's not the business of the government to control prices.

SCALE 6. UNIONS (Against powerful unions)

33. Unions are too powerful.

*34. We'd all be better off if labor unions were stronger.

35. Employers should have the right to hire non-union workers if they want to.

---

* Indicates reverse scoring item.

SCALE 7. TREATMENT OF WORKERS (Workers' treatment is fair)

36. The average worker today is getting his or her fair share.

*37. The average worker is getting less than his or her fair share.

*38. Most companies don't give employees a fair share of what the company earns.

39. Most companies give employees a fair share of what the company earns.

SCALE 8. THE ECONOMIC STATUS QUO (Against the status quo)

40. America's wealth is far too unequally shared.

41. The situation of the average person is getting worse, not better.

42. There are few real opportunities for the average person to start a business in America today.

43. We need a way to make incomes more equal in this country.

44. One of the bad things about our economic system is that the person at the bottom gets less help and has less security than in some other systems.

---

* Indicates reverse scoring item.

APPENDIX 2:

THE EVI IN A FORM FOR CLASSROOM USE

THE ECONOMICS VALUES INVENTORY

The Economics Values Inventory (EVI) is a self-administered measure of attitudes and values concerning economic issues, for use with junior-high-school-age youth (seventh, eighth, and ninth graders). It was developed with a diverse sample of almost 1100 youth from 35 classrooms in all regions of the country.

The EVI consists of eight scales, each measuring values in a different substantive area within the general topic of economics. The scales were empirically derived from student responses to a large pool of items, using factor analytic techniques. Scale reliabilities (Cronbach's alpha) range from .5 to .8. Strong evidence of the construct validity of the EVI is found in its sensitivity to values differences in different criterion subgroups of students, such as youth of different socio-economic backgrounds; with different degrees of economic knowledge; and with different amounts of personal experience with the economy.

The EVI is easily administered in a single class period. It yields eight values scores, and scores are easily computed by summing the responses to all items on a particular scale and dividing that sum by the total number of items in the scale, i.e., by computing an average of the scale item responses.

The research on the EVI indicates the necessity of including the somewhat lengthy introduction to the items that appears below. The introduction is important because it establishes a common frame of reference and shared vocabulary for the youthful respondents.

On the following pages the scales that comprise the Economics Values Inventory are first presented, scale-by-scale. Then the EVI, in the form in which we recommend it be administered in the classroom, is shown.

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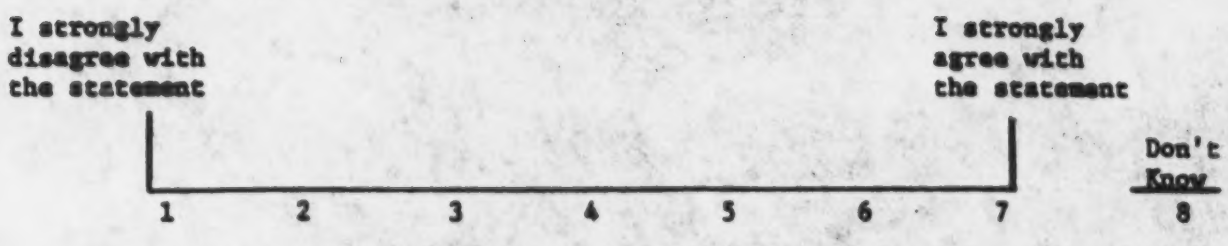
ECONOMICS VALUES INVENTORY



On the next three pages there are statements that you may agree or disagree with. We're interested in learning about your feelings concerning these statements. All of them have to do with the American economy, or how we make, buy, and sell things. We are all part of the economy. Businesses and government are part of the economy too.

When you buy a record or ride on a bus or go to the dentist, you are taking part in the economy. When a business makes something, advertises its product, or sets a price, it is taking part in the economy. The government takes part in the economy too, when it provides a service such as delivering the mail, or when it makes rules that businesses must follow. When you answer the questions below, it will give us a chance to learn what you are feeling about economic issues.

Here's an example:

_____ If I shop and compare before I buy, I can save money.

If you feel strongly that "If I shop and compare before I buy, I can save money," you would write a "7" in the space before that statement. If you disagree slightly you would write a "3" next to the statement. If your feelings are no stronger one way than the other, you would write a "4" next to the statement.

Maybe the statement is one you don't understand, or is about something you've never really thought about and have no feelings about. If so, write an "8" for "Don't Know" next to the statement.

There are no right or wrong answers here. Please just tell us how you feel, and what you believe, about each statement. Now let's turn to the next page--and begin!

ECONOMICS VALUES INVENTORY

I strongly disagree with the statement — I strongly agree with the statement — Don't Know

1 2 3 4 5 6 7 8

_____ 1. The unemployed shouldn't blame themselves for their situation: it's the fault of the economic system.

_____ 2. Resources are always limited, and we must make hard choices about the best way to use them.

_____ 3. One of the bad things about our economic system is that the person at the bottom gets less help and has less security than in some other systems.

_____ 4. The average worker today is getting his or her fair share.

_____ 5. The average worker today is getting less than his or her fair share.

_____ 6. It's the duty of people to do their jobs the best they can.

_____ 7. America's wealth is far too unequally shared.

_____ 8. There are few real opportunities for the average person to start a business in America today.

_____ 9. The poor and the ill have a right to help from the government.

_____ 10. It is the responsibility of government to take care of people who can't take care of themselves.

_____ 11. Unions are too powerful.

_____ 12. We need a way to make incomes more equal in this country.

_____ 13. Profits are essential to our country's economic health.

_____ 14. Our society owes much to the contributions of business.

_____ 15. Being in business means taking unfair advantage of others.

_____ 16. The way our economic system is set up, nobody has a chance to get ahead any more.

_____ 17. My freedom to choose my own occupation is very important to me.

_____ 18. Competition between businesses makes for the lowest prices.

_____ 19. Businesses could provide more jobs, goods and services if they didn't have to pay so much in taxes.

_____ 20. It's foolish to do more than you have to in a job.

ECONOMICS VALUES INVENTORY

I strongly disagree with the statement — I strongly agree with the statement — Don't Know

1 2 3 4 5 6 7 8

_____ 21. A person who cannot find a job has only himself to blame.

_____ 22. Most companies don't give employees a fair share of what the company earns.

_____ 23. Most companies give employees a fair share of what the company earns.

_____ 24. Having the freedom to start my own business really means having the freedom to take advantage of others.

_____ 25. It's no use worrying about the economy; I can't do anything about it anyway.

_____ 26. Our economy needs more people who are willing to save for the future.

_____ 27. A company deserves its profits when they come as the result of doing the best job for less money.

_____ 28. If workers want higher wages, they must work harder and produce more.

_____ 29. Companies should only be allowed to charge a government-controlled price for their products.

_____ 30. Profit is a sign that someone is being taken advantage of.

_____ 31. Advertising helps consumers to make intelligent choices.

_____ 32. Most people like their jobs.

_____ 33. Getting ahead is mostly a matter of luck.

_____ 34. The situation of the average person is getting worse, not better.

_____ 35. We'd all be better off if labor unions were stronger.

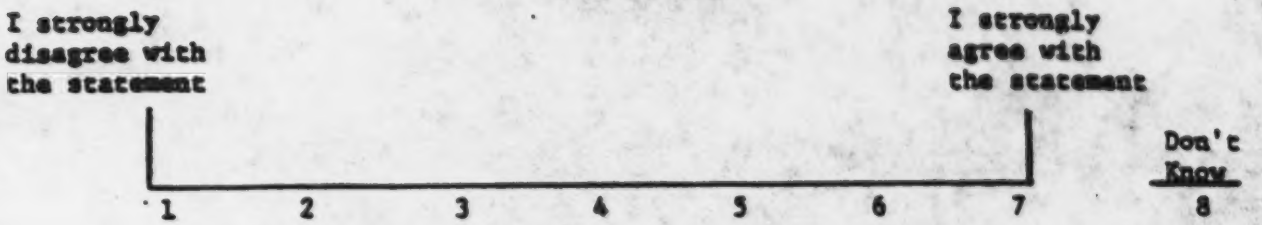
_____ 36. If you have a valuable skill, you'll get ahead in our society.

_____ 37. Taking care of the poor and the sick is the job of families and churches, not the job of government.

_____ 38. It's not the business of government to control prices.

_____ 39. Most businesses won't sell products they think are unsafe.

_____ 40. It should be the duty of the government to be sure that everyone has a secure job and a decent standard of living.



_____ 41. Government should listen more to what the business community has to say.

_____ 42. Employers should have the right to hire non-union workers if they want to.

_____ 43. People who blame other people or "society" for their economic problems are just copping out.

_____ 44. Groups of individuals with specialized skills, working together, can produce better products than individuals working alone.